## Central Valley Flood Protection Plan: Major Physical and Operational Elements of Preliminary Approaches and State Systemwide Investment Approach

FLOOD MANAGEMENT ELEMENT	PROJECT LOCATION OR REQUIRED COMPONENTS	ACHIEVE SPFC DESIGN FLOW CAPACITY	PROTECT HIGH RISK COMMUNITIES	ENHANCE FLOOD SYSTEM CAPACITY		STATE SYSTEMWIDE INVESTMENT APPROACH
Bypasses						
New Bypass Construction and Existing Bypass Expansion	<ul> <li>Feather River Bypass</li> <li>Sutter Bypass expansion</li> <li>Yolo Bypass expansion</li> <li>Sacramento Bypass expansion</li> <li>Lower San Joaquin River Bypass (Paradise Cut)</li> <li>Components potentially include land acquisition, conservation easements, levee improvements, new levee construction</li> </ul>			YES	<b>→</b>	YES
Reservoir Storage and Operations						
Forecast-Coordinated Operations/Forecast-Based Operations	Fifteen reservoirs within Sacramento River Basin and San Joaquin River Basin	YES	YES	YES		YES
Reservoir Storage/Enlarge Flood Pool <sup>1</sup>	<ul><li>Oroville</li><li>New Bullards Bar</li><li>Don Pedro</li><li>McClure</li><li>Friant</li></ul>			YES	$\rightarrow$	
Easements	<ul> <li>Sacramento River Basin – 200,000 acre-feet</li> <li>San Joaquin River Basin – 100,000 acre-feet</li> </ul>			YES		
Flood Structure Improvements						
Major Structures	<ul> <li>Intake structure for new Feather River Bypass</li> <li>Butte Basin small weir structures</li> <li>Upgrade and modification of Colusa and Tisdale weirs</li> <li>Sacramento Weir widening and automation</li> <li>Gate structures and/ or weir at Paradise Cut</li> <li>Upgrade of structures in Upper San Joaquin bypasses</li> <li>Low level reservoir outlets at New Bullards Bar Dam</li> <li>Fremont Weir widening and improvement</li> <li>Other pumping plants and small weirs</li> </ul>			YES	$\rightarrow$	YES
System Erosion and Bypass Sediment Removal Project	<ul> <li>Cache Creek Settling Basin sediment management</li> <li>Sacramento system sediment remediation downstream from weirs</li> </ul>			YES		YES





## **California Department of Water Resources Division of Flood Management**



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Urban Improvements						
Target 200-Year Level of Protection	Selected projects developed by local agencies, State, federal partners		YES	YES	$\rightarrow$	YES
Target SPFC Design Capacity	Urban Levee Evaluations Project results	YES <sup>2</sup>				
Non-SPFC Urban Levee Improvements	Includes approximately 120 miles of non-SPFC levees that are closely associated with SPFC urban levees. Performance of these non-SPFC levees may affect the performance of SPFC levees.	YES	YES	YES		YES
Small Community Improvements						
Target 100-Year Level of Protection	Small communities protected by the SPFC		YES <sup>3</sup>	YES <sup>3</sup>	$\rightarrow$	YES <sup>4</sup>
Target Design Capacity	Non-Urban Levee Evaluations Project results	YES <sup>2</sup>		YES <sup>2</sup>		
Rural-Agricultural Improvements						
Site-Specific Rural-Agricultural Improvements	Based on levee inspections and other identified critical levee integrity needs				$\rightarrow$	YES
Target Design Capacity	Non-Urban Levee Evaluations Project results	YES <sup>2</sup>		YES <sup>2</sup>		
Ecosystem Restoration						
Fish Passage Improvements	<ul> <li>Sutter Bypass and fish passage east of Butte Basin</li> <li>Fremont Weir fish passage improvements</li> <li>Yolo Bypass/Willow Slough Weir fish passage improvements</li> <li>Yuba River fish passage and fish screen</li> <li>Deer Creek</li> </ul>			YES	$\rightarrow$	YES
Ecosystem Restoration and Enhancement	For areas within new or expanded bypasses, contributing to or incorporated with flood risk reduction projects			YES		YES
River Meandering and Other Ecosystem Restoration Activities	At selected levee setback locations in Sacramento and San Joaquin river basins			YES		YES (at select locations)

SPFC = State Plan of Flood Control

State = State of California

<sup>&</sup>lt;sup>1</sup> All preliminary approaches and State Systemwide Investment Approach include Folsom Dam Raise, as Congress authorized. <sup>2</sup> Actual level of protection varies by location.

<sup>&</sup>lt;sup>3</sup> Includes all small communities within the SPFC.

<sup>&</sup>lt;sup>4</sup> Includes selected small communities within the SPFC.